

Title (en)

LIQUID ATOMIZING NOZZLE INSERT WITH COLLIDING JETS

Title (de)

FLÜSSIGKEITSZERSTÄUBUNGSDÜSENEINSATZ MIT KOLLIDIERENDEN STRAHLEN

Title (fr)

GARNITURE DE BUSE D'ATOMISATION DE LIQUIDE À JETS EN COLLISION

Publication

**EP 3394421 A1 20181031 (EN)**

Application

**EP 16880076 A 20161222**

Priority

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Abstract (en)

[origin: WO2017112842A1] In one embodiment, an insert for a fluid nozzle is provided. The insert includes a plurality of passages oriented in included angles to produce colliding jets of a liquid at one or more focal points a specific distance away from the exits of the passages (in one example, the colliding jets of liquid increase fluid atomization and reduce liquid lengths). In one embodiment, the nozzle insert is cylindrical in shape. The insert may be housed, held, trapped or otherwise in material connection with an outer nozzle. The colliding jets of liquid may utilize the kinetic energy carried in particle to particle collision to improve liquid break-up in order to form smaller particles (resulting in high vaporization rates and shorter liquid lengths).

IPC 8 full level

**F02M 61/18** (2006.01)

CPC (source: EP KR US)

**B05B 1/26** (2013.01 - EP US); **F02M 61/18** (2013.01 - US); **F02M 61/1806** (2013.01 - EP KR); **F02M 63/0012** (2013.01 - KR); **F02M 61/1893** (2013.01 - EP); **F02M 63/0078** (2013.01 - EP); **F02M 2200/16** (2013.01 - KR); **F02M 2200/80** (2013.01 - KR); **F02M 2200/8084** (2013.01 - KR); **Y02T 10/12** (2013.01 - EP)

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